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EXAMINER

EGAN, BRIAN P

ART UNIT

PAPER NUMBER

1772

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17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/554,269

Applicant(s)

BRAUNER, MANFRED

Examiner

Brian P. Egan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2003.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The Examiner withdraws the 35 U.S.C. 112, second paragraph rejections of Claims 1, 4, and 8-9 from the previous office action in view of Applicant's amendments.

2. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as his invention. It is unclear whether the Applicant is claiming a lid along with a collapsible container, or if the Applicant is claiming a lid whose intended use is for a collapsible container. Furthermore, it is unclear what feature of the article is intended to be collapsible. Is the lid collapsible? Are the sidewalls collapsible? Finally, with regards to the method and functional limitations present in the claim, the Examiner advises the Applicant to refer to the above suggestions (as detailed in the claim 1, 4, and 8-9 rejection) to lend patentable weight to these limitations. Proper clarification and/or correction are required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-15 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brauner (WO 97/39954) in view of Rehrig (#3,565,278), Umiker (#5,395,010), and Boucher-Giles (WO 97/16353).

Brauner teaches a flat or semi-flat element to be used in a collapsible container (See Abstract and Figs. 1-5) including a partly or completely circumambient frame (Page 2, lines 2-5) and an intermediate wall section (Fig. 1, #1), which element is manufactured through molding of a polymeric material (Page 1, lines 27-28), whereby the frame is used as a carrying structure (Page 2, lines 19-21). The frame contains a closed hollow profile (Page 2, lines 2-5) and the frame is connected to the wall at its corner (Figs. 3-4, #7 (Frame) connected to #1 (Wall Section)), thereby being attached at a symmetrical point whereby a gravity center line runs through the connection point and the opposite corner. The closed hollow profile of the frame is formed by injection molding (Page 1, lines 27-28). The thermoplastic material is allowed to solidify closest to the inner wall of the mold so that a barrier is formed before injecting a pressurized fluid to create the hollow profile (Page 2, lines 2-14).

Brauner fails to teach the use of a resilient section to combat temperature related shrinkage of the injection molded parts. Brauner also fails to teach U-shaped and ribbed frame embodiments, and also fails to teach the wall section being thinner at the side closest to the frame section than the average thickness of the wall section.

Rehrig teaches the use of a resilient section ("corrugations") in injection-molded containers (see Abstract). Rehrig teaches the use of the resilient section for the purpose of providing a flexible, slightly resilient, springlike section to accommodate longitudinal expansion

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and shrinkage in the panel, as well as limited lateral deflection of the panel – thereby increasing the life of the crate (Col. 2, lines 6-18).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner to include a resilient section between parts exhibiting differential temperature related shrinkage, i.e., between the frame and wall section, as taught by Rehrig in order to provide a flexible, slightly resilient, springlike section to accommodate longitudinal expansion and shrinkage in the panel, as well as limited lateral deflection of the panel – thereby increasing the life of the crate.

Umiker teaches that it is notoriously well known to provide frame structures of plastic containers with multiple embodiments, including the conventional embodiments which include U-shaped and ribbed profiles (see Fig. 2), as well as embodiments slightly more structurally sound which include closed hollow profiles (see Fig. 3). Although Umiker fails to teach a rib structure wherein the ribs are spaced at a distance from each other smaller than the height of each of the plurality of ribs, it would have been an obvious matter of design choice to change the size of each rib and distance between each rib, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Umiker teaches the notoriously well known embodiments for the purpose of demonstrating the multiple forms of handle portions that are available for plastic container structures.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner by interchanging the frame structure

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with U-shaped, ribbed, and hollow profiles as taught by Umiker in order to create a desirable handle portion for the end product.

Boucher-Giles teaches a plastic-molded collapsible container whereby the wall sections are reduced in thickness by tapering the wall towards the base creating a pivot line. Boucher-Giles teaches the reduced-thickness wall sections for the purpose of allowing proper folding of the collapsible container (Page 4, lines 9-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner to include a tapered wall portion such that the wall thickness on the side of the wall section is thinner than the average thickness of the wall portion as taught by Boucher-Giles in order to allow proper folding of the collapsible container. Further note that such a modification would create a wall section whose thickness is disparate to the thickness of the circumambient frame in accordance with Applicant's newly added claim 24.

5. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owsen (#2,880,902), the Applicant's Admission on page 1 of the specification, and Biglin (#3,634,182).

Owsen teaches a collapsible container comprising a plurality of sidewalls (see Fig. 1) wherein the container comprises a flat or semi-flat element (see Fig. 2) comprising a completely circumambient frame (Figs. 1-2, #18) which element is formed through molding of a thermoplastic polymeric material (Col. 3, lines 21-22), wherein the element comprises a carrying structure, constituted by the frame (Figs. 1-2, #18), and a wall section (Fig. 2, #14). The wall section and the frame have disparate thicknesses (see Figs. 1-2).

Owsen fails to teach a resilient section that is part of the wall section wherein differences in the temperature related shrinkage between the circumambient frame and the wall section are absorbed by the resilient section whereby the resilient section prevents warping of the element.

Although Owsen does not explicitly detail the shrinkage problem due to shrinkage rates of disparate thickness parts, the Applicant's own admission on page 1 of the specification states that warping due to shrinkage rates of disparate thickness parts is a notoriously well known problem in the art, i.e., "it is a well known fact that the material thickness in such injection molded products may not differ too much within the product since problems with warping will otherwise occur. This warping is caused by the temperature related shrinking, which is relatively great in thermoplastic materials (page 1, second paragraph)."

Biglin teach an injection molded container comprising a resilient section between the circumambient frame and the wall section wherein the resilient section is part of the wall section (Fig. 9, #53). The resilient section is formed by using an annular lip (Fig. 6, #16) such that the annular lip retains thermoplastic material in the circumambient frame section ("rim cavity") from that in the remainder of the mold cavity (Col. 2, lines 34-39). Biglin teach the use of a resilient section for the purpose of preventing shrinkage of the frame away from the wall section (see Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Owsen to include a resilient section as taught by Biglin in order to prevent shrinkage of the frame away from the wall section, motivated by the notoriously well known need to correct containers for temperature related shrinkage problems in disparate thickness parts as detailed by the Applicant.

***Response to Arguments***

6. Applicant's arguments, see paper no. 10, filed April 25, 2003, with respect to the 35 U.S.C. 103(a) rejection from the previous office action over Knox, Painsith, Rehrig, and King have been fully considered and are persuasive. The rejection of Claims 1-21 over the aforementioned prior art has been withdrawn.

7. Applicant's arguments filed April 25, 2003 with regards to the 35 U.S.C. 103(a) rejection over WO '954 (Brauner), Rehrig, Umiker, and WO '353 (Boucher-Giles) have been fully considered but they are not persuasive.

The Applicant's primary two contentions are that Rehrig fails to teach a resilient section that is part of the wall section and that incorporation of the resilient section of Rehrig into WO '954 would destroy the collapsibility of the container detailed in WO '954.

First, the Examiner notes that it has been held that one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. *In re Keller*, 208 USPQ 871 (CCPA 1981). Furthermore, the test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McGlaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969).

Here, Rehrig clearly teaches the use of a resilient section to accommodate temperature related shrinkage between two parts (the crate and panels) (see Abstract). Rehrig teaches that it is notoriously well known in the art that warpage occurs in injection molded containers due to



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disparate thickness of parts and solves the problem of disparate thickness parts by incorporating corrugated sections (Col. 1, lines 16-23; Col. 2, lines 6-18). The Applicant has provided a narrow interpretation of their claimed limitations and state that the resilient section of Rehrig is not part of the wall section. To the contrary, the Examiner is required to interpret the claims as broadly as possible. There is nothing precluding the panel intersections of Rehrig from being defined as a "wall section" and to define the surrounding walls of the crate as a "circumambient frame." Even if the aforementioned interpretation falls outside of the scope of the Applicant's claimed invention, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have corrugated the crate walls and/or crate floor instead of the panels since the rearrangement of parts involves only routine skill in the art.

As noted above, the test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. Taking Rehrig and WO '954 as a whole, it would have been obvious to one of ordinary skill in the art to provide an injection molded structure with corrugated sections to accommodate for temperature related shrinkage of the various parts of the end product. Since it has been held that rearranging parts of an invention is an obvious modification, it would have been obvious to one of ordinary skill to place the corrugated sections between the circumambient frame and wall sections of WO '954 such that the temperature related shrinkage between these two parts is absorbed by the corrugations.

With regards to the Applicant's contention that integrally molding the partition panels into the collapsible container of WO '954 would destroy the collapsibility of WO '954, the

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Examiner respectfully disagrees. It is not the partition panels per se that are absorbing the temperature related shrinkage between the walls and the panels – it is the corrugations that are absorbing the shrinkage. Therefore, the Examiner posits that it would have been obvious to one of ordinary skill in the art to corrugate sections of a wall structure to prevent warping of the injection molded product. Thus, a partition panel need not be inserted into a container to prevent warping – a wall section need only be corrugated such that temperature related shrinkage is absorbed by the resilient section.

With regards to whether the carrying structure of Rehrig is weaker than that of the Applicant's claimed invention, the limitation to which the Applicant relies, i.e., page one of the specification's recitation that the container has a strong carrying capacity, is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064. Note also that a "strong" carrying capacity is a relative term and is not adequately defined in the specification to distinguish how "strong" the structure must be to fall within the Applicant's claimed invention. Furthermore, just because the container of Rehrig flexes to allow for longitudinal compression and expansion does not preclude the frame from maintaining its ability to perform with "strong" carrying capacity. Finally, the carrying structure the Examiner relies upon in rendering the Applicant's claimed invention obvious is the carrying structure disclosed by WO '954 – thus, it is unclear why the carrying structure of Rehrig is relevant.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Brian P. Egan*  
7/14/09

*William P. Watkins III*

**WILLIAM P. WATKINS III  
PRIMARY EXAMINER**